

# UPPER VISITORS CENTER WATER SYSTEM UPGRADES AT LEWIS AND CLARK CAVERNS STATE PARK





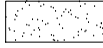


















NEAR CARDWELL, MONTANA

SHEET INDEX





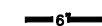



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LEGEND

EXISTING FEATURES

	BUILDING		ROCK
	ASPHALT		TELEPHONE VAULT
	CONCRETE		WATER VAULT
	FLAG POLE		YARD HYDRANT
	BOLLARD		BLOWOFF
	ADAM SIGN		ELECTRICAL SERVICE OR TRANSFORMER
	TELEPHONE PEDESTAL		UNDERGROUND POWER
	BASEMENT WALL		TELEPHONE
	ROOF LINE		WATER LINE
	MASONRY WALL		JUNIPER
	BENCH		TREE
			TRASH CAN

PROPOSED FEATURES

	ASPHALT
	COLORED SIDEWALK
	SIDEWALK
	1" W WATER LINE
	6" CONDUIT
	BOXED GROUND HYDRANT
	DRINKING FOUNTAIN
	CURB VALVE

PROJECT SITE  
CAVERN'S VISITORS CENTER



VICINITY MAP



J. LARSON  
DRAWN BY: DATE:  
J. LARSON  
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REVISED BY: DATE:  
J. LARSON  
APPROVED BY: DATE:

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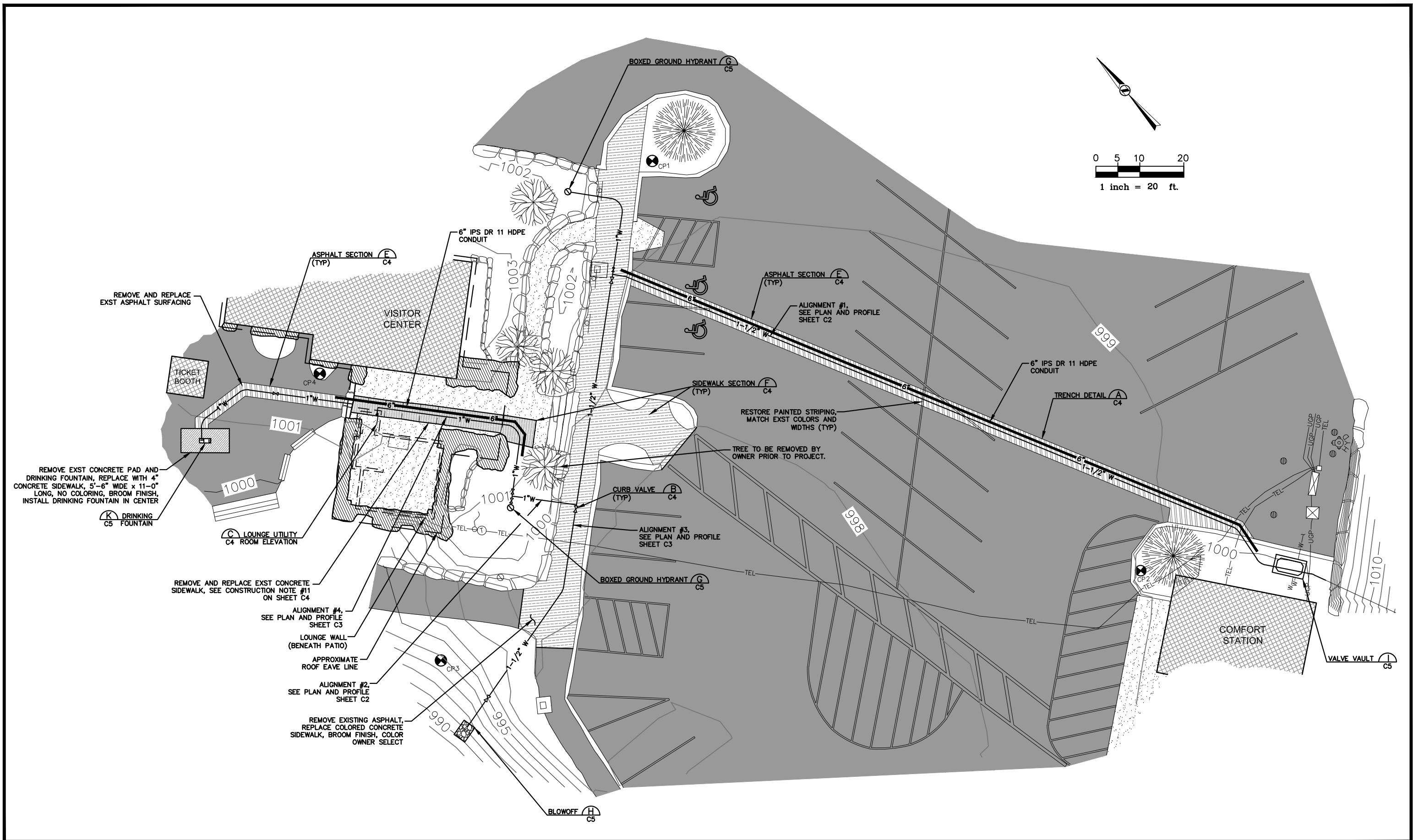
Montana Fish  
Wildlife & Parks

TITLE SHEET  
UPPER VISITORS CENTER WATER SYSTEM UPGRADE AT  
LEWIS AND CLARK CAVERNS STATE PARK  
FWP #7136343



28 ANTLER AVENUE  
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SHEET: T1



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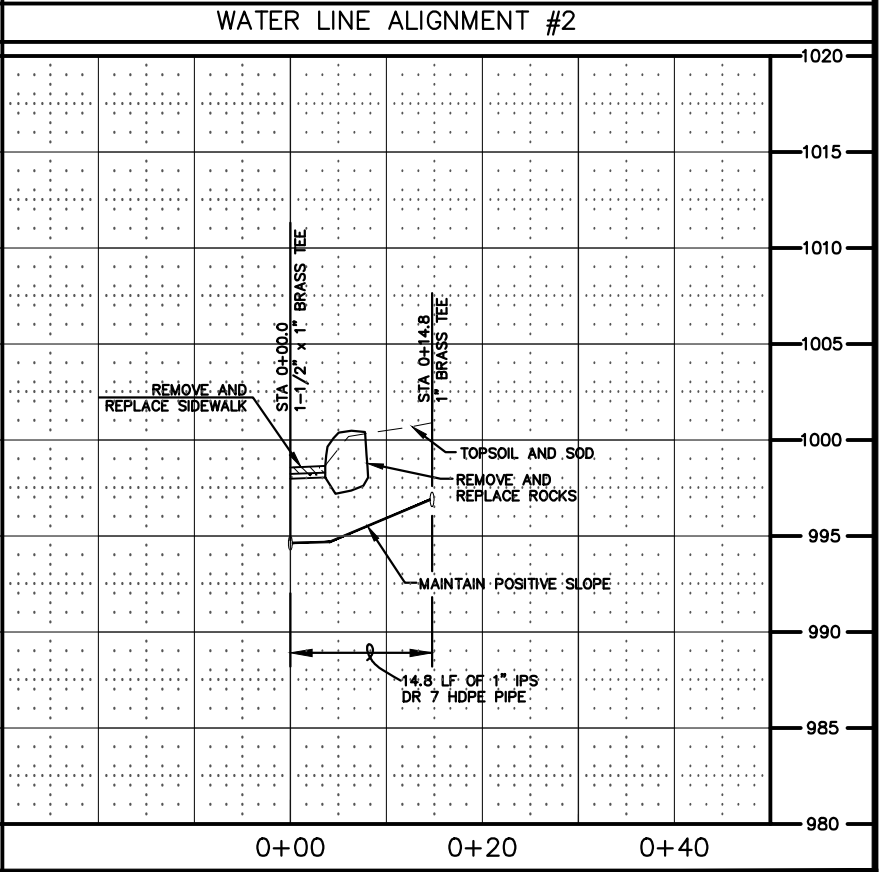
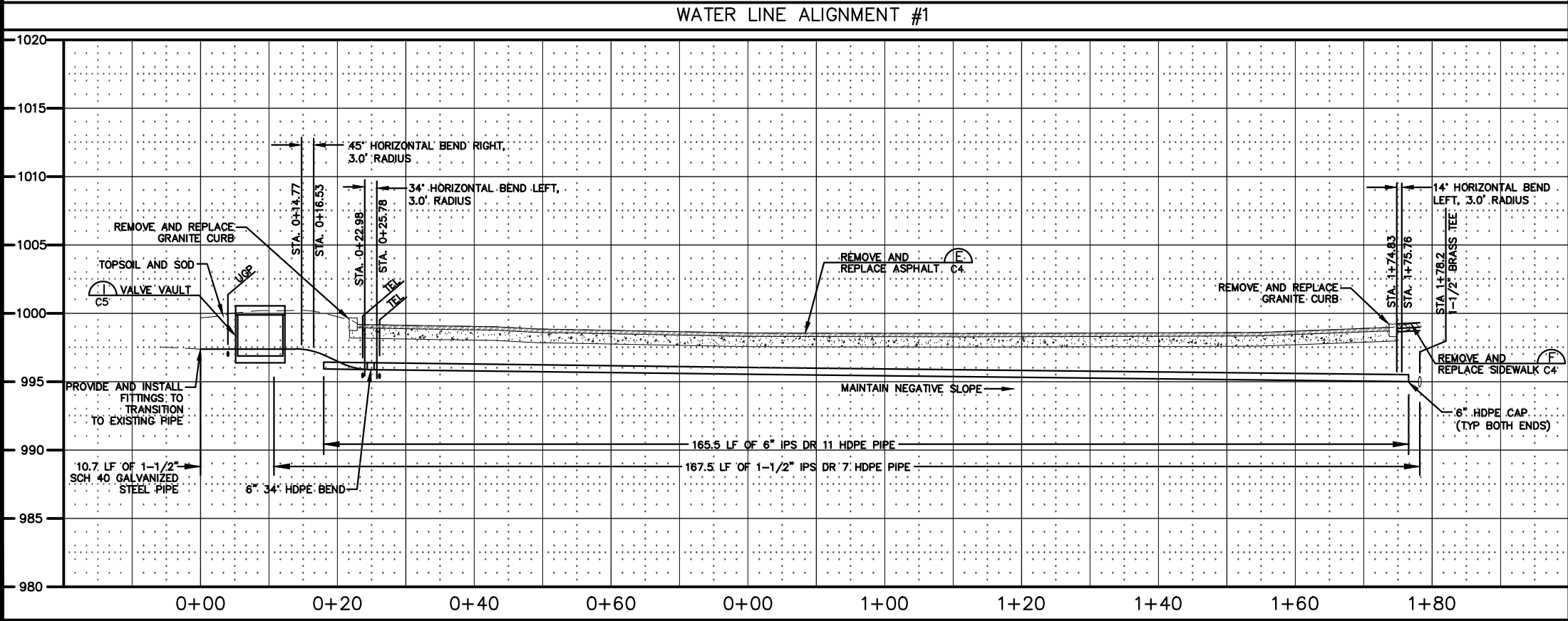
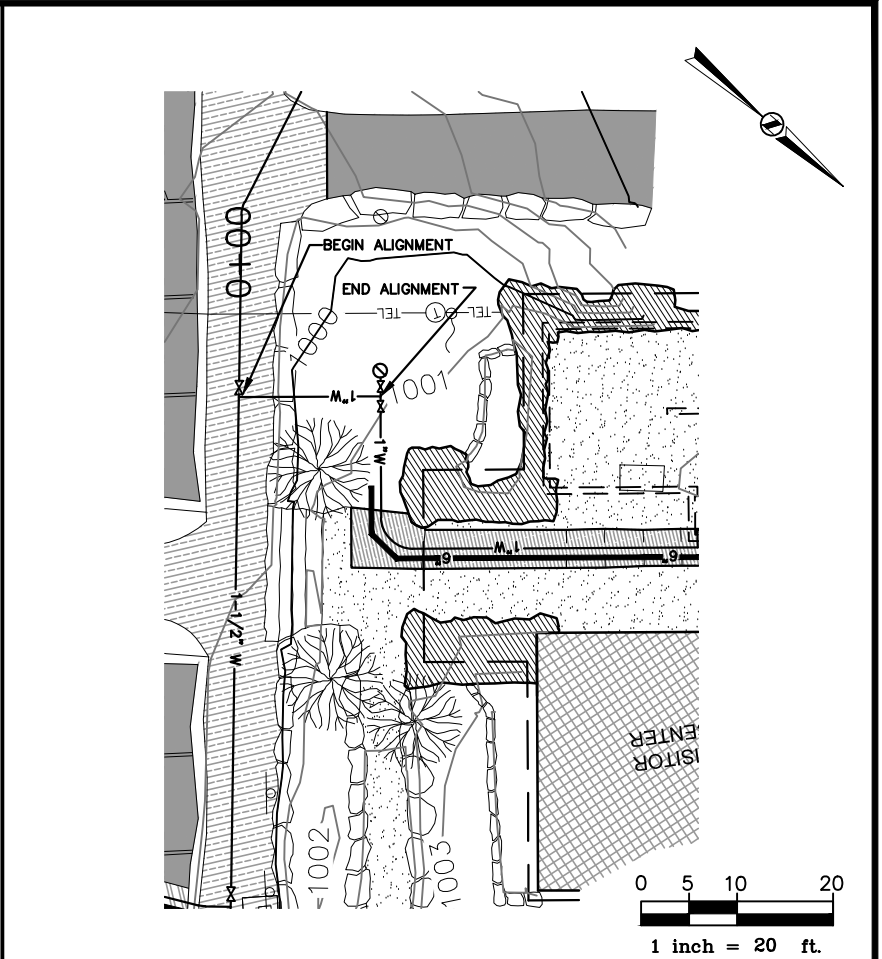
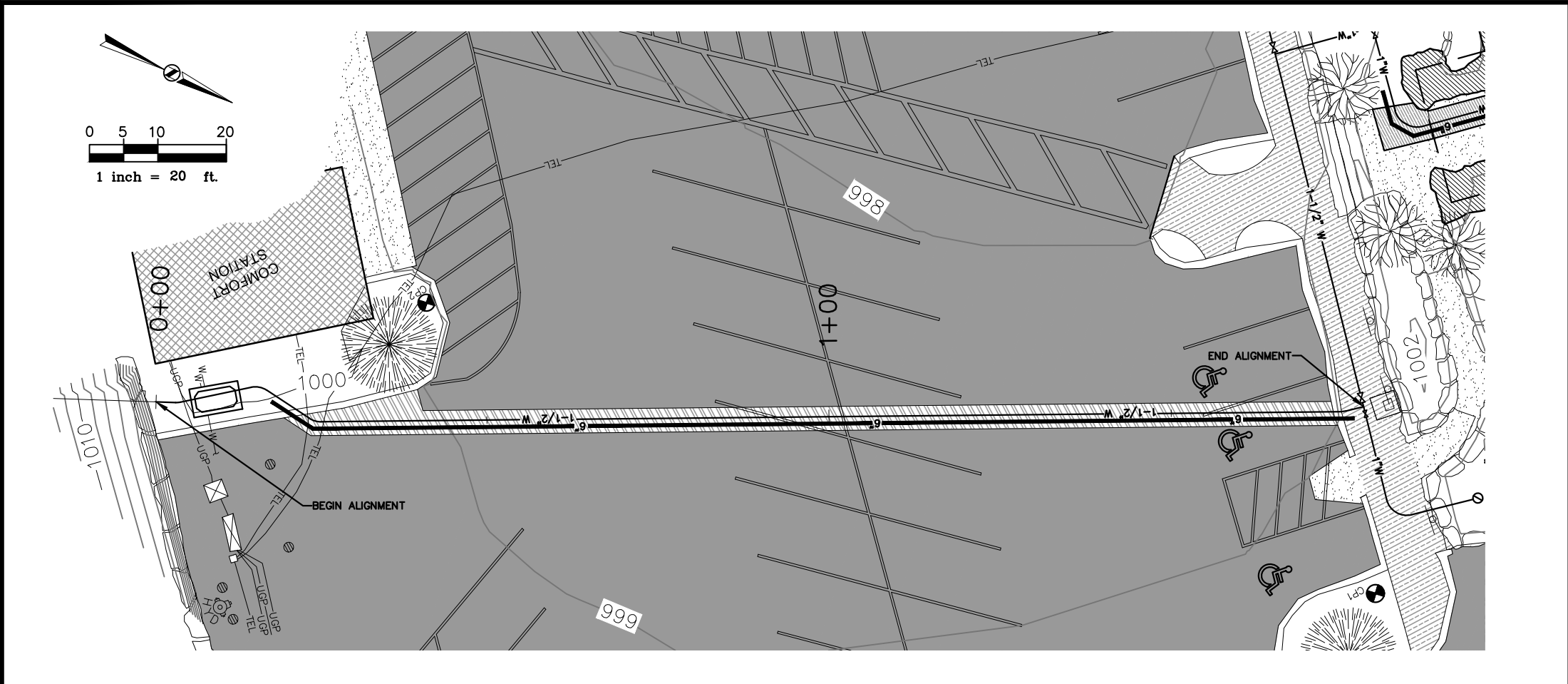


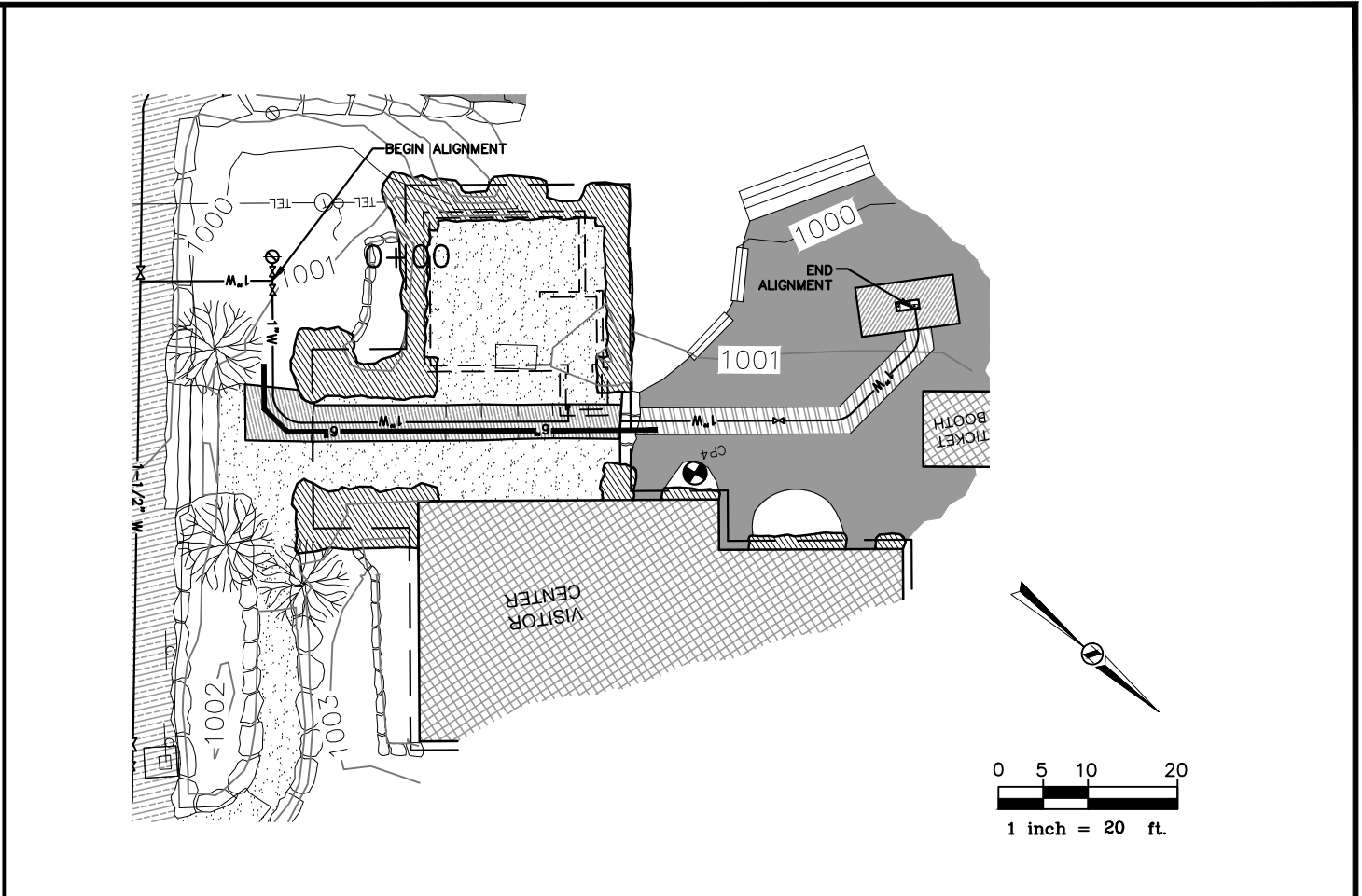
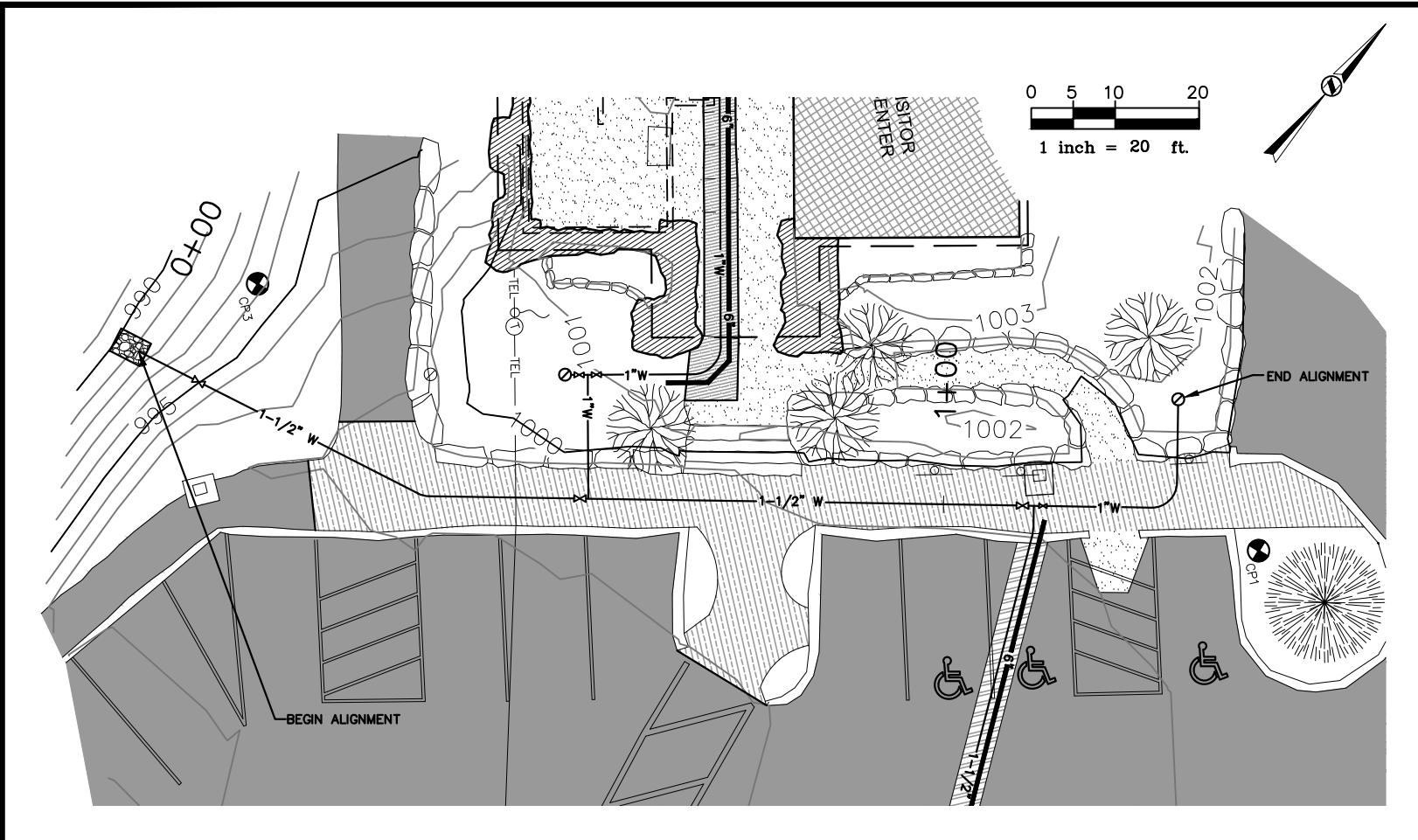
**SITE PLAN**  
 UPPER VISITORS CENTER WATER SYSTEM UPGRADE AT  
 LEWIS AND CLARK CAVERNS STATE PARK  
 FWP #7136343

**LARSON CIVIL**  
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SHEET: **C1**

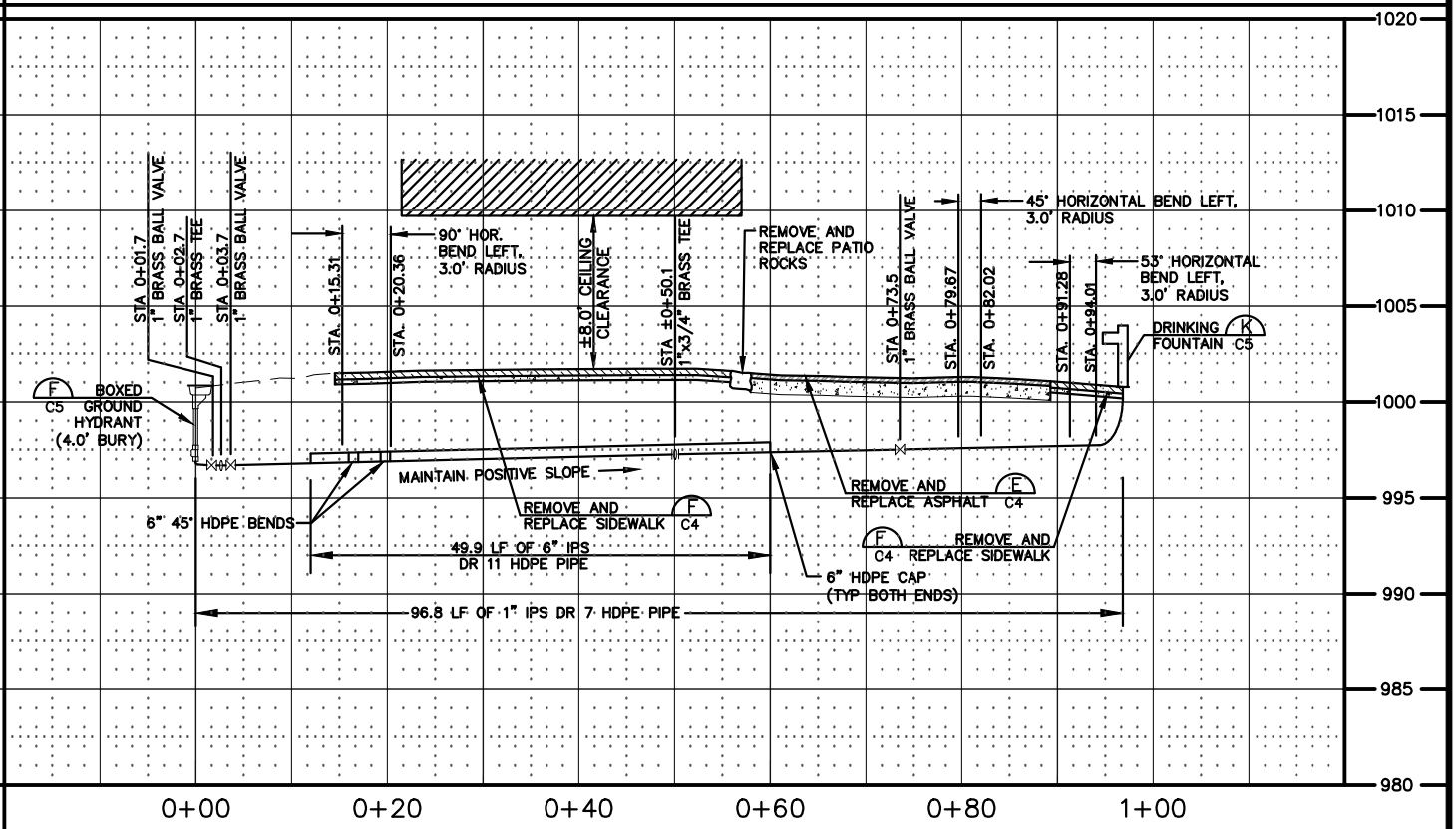
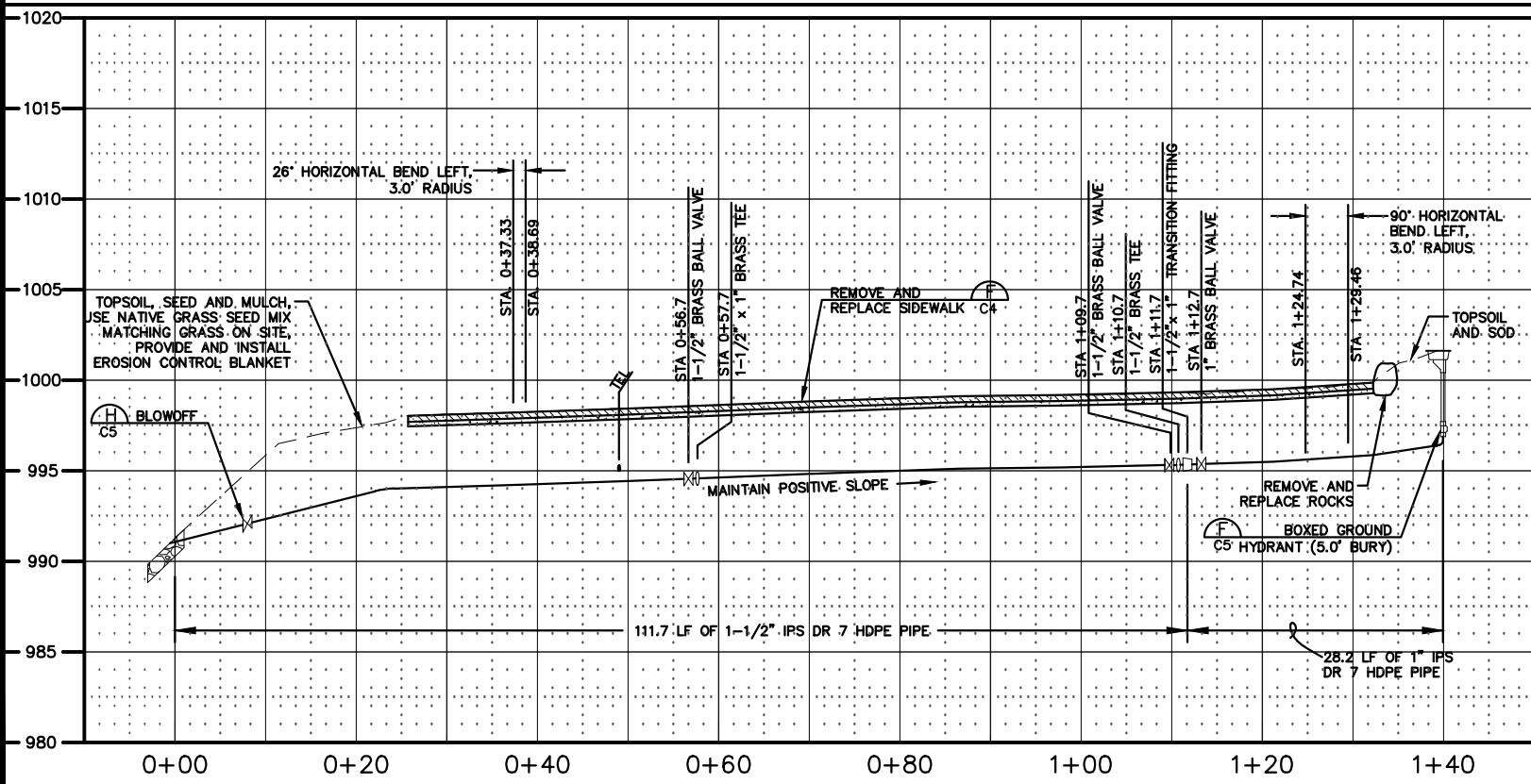






WATER LINE ALIGNMENT #3

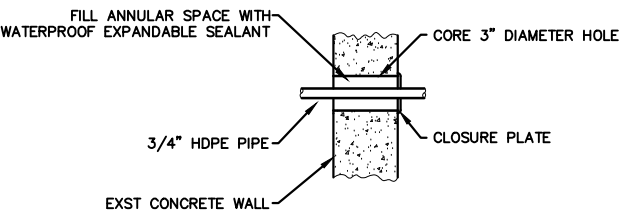
WATER LINE ALIGNMENT #4



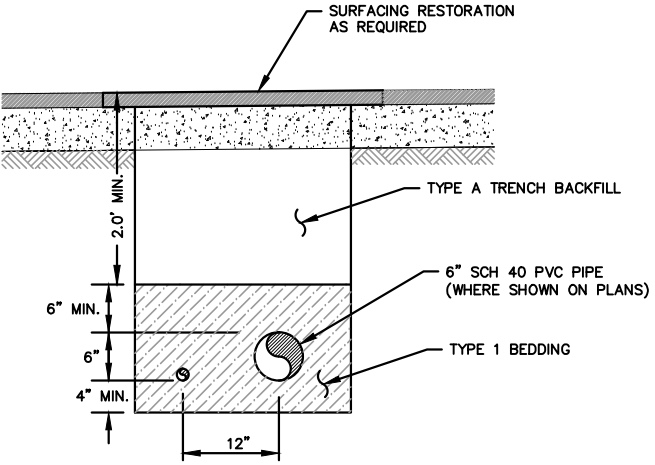


CONSTRUCTION NOTES:

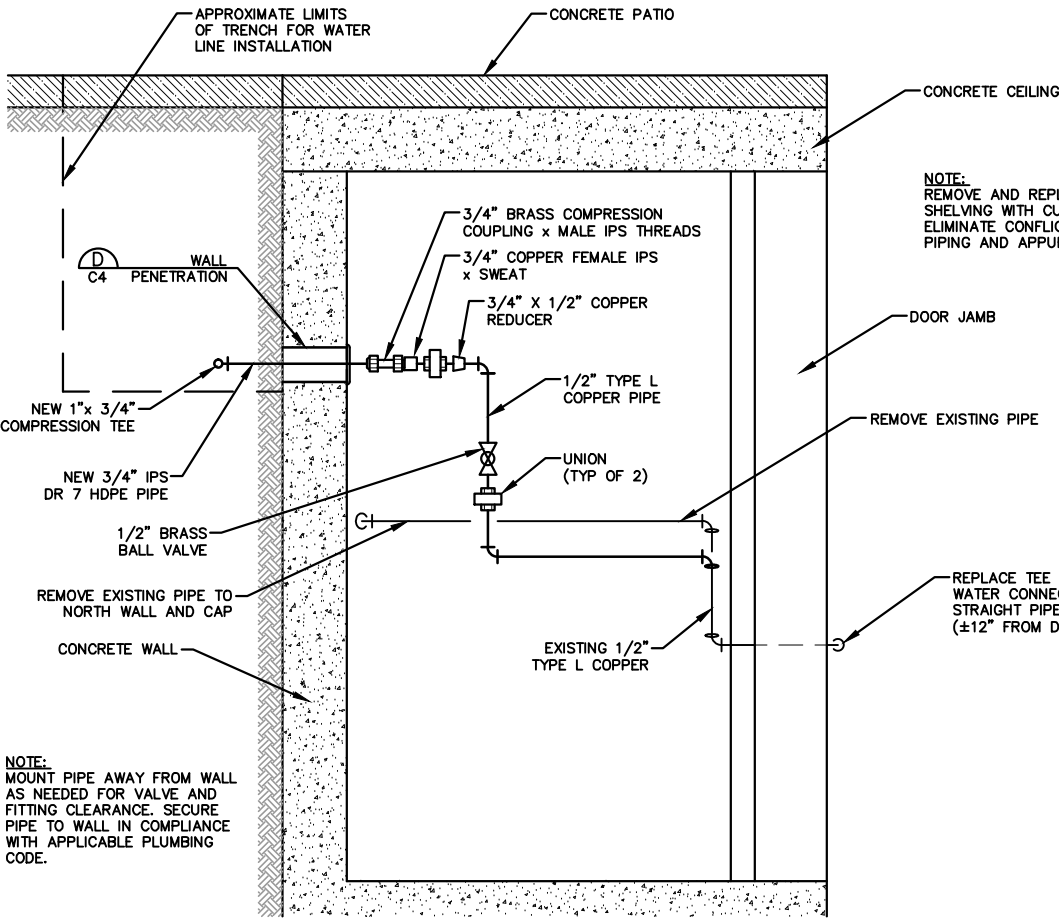
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH "MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS", SIXTH EDITION (MPW).
- WATER LINES TO BE BURIED WITH 3'-0" MINIMUM COVER BELOW FINISHED GRADE.
- BURIED WATER LINES SHALL BE IPS DR 7 HDPE PIPE OF THE SIZE INDICATED IN THE DRAWINGS, UNLESS OTHERWISE LABELED.
- BEFORE DIGGING, CALL 811 TO LOCATE EXISTING UTILITIES.
- COMPACTION OF TRENCH BACKFILL SHALL BE TO 95% OF ASTM D698.
- VERIFY THE DIAMETER AND MATERIAL OF EXISTING PIPING AT ALL CONNECTION POINTS PRIOR TO ORDERING FITTINGS AND COUPLINGS.
- DETECTABLE WARNING TAPE SHALL BE INSTALLED CENTERED OVER ALL WATER LINES AT A DEPTH OF 18" BELOW FINISHED SURFACE.
- EXISTING UTILITIES ARE SHOWN FOR REFERENCE ONLY. DEPTHS AND LOCATIONS ARE ESTIMATED. PRIVATE UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR IS RESPONSIBLE TO LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK. ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER.
- MATERIALS TESTING SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL INCLUDE 1 COMPACTION TEST PER 200- FEET OF EACH 12" LIFT OF TRENCH BACKFILL AND 1 TEST PER 100- FEET OF CRUSHED BASE COURSE INSTALLED.
- ALL NEW WATER LINES SHALL BE PRESSURE TESTED AS REQUIRED IN THE PLUMBING SPECIFICATION PRIOR TO INSTALL ASPHALT OR CONCRETE SIDEWALK.
- SIDEWALK IN THE PLAZA AREA HAS HISTORIC VALUE AND SHALL BE REMOVED AND REPLACED IN COMPLIANCE WITH THE FOLLOWING REQUIREMENTS.
  - EXISTING CONCRETE SHALL BE PROTECTED BY TAPING AND PROTECTIVE COVERING.
  - SOIL MAY NOT BE PLACED ON UNPROTECTED EXISTING CONCRETE.
  - SAW CUTS SHALL BE ALONG EXISTING JOINTS.
  - CONCRETE SHALL BE FINISHED TO MATCH EXISTING TROWEL FINISH.
  - CONTROL JOINT PATTERN SHALL MATCH EXISTING LAYOUT AND LOCATIONS.
  - TO THE EXTENT POSSIBLE NEW CONCRETE SHALL BE PLACED TO MATCH EXISTING CONCRETE IN APPEARANCE AND TEXTURE.
- ADDITIONAL COMPENSATION FOR ROCK EXCAVATION WILL NOT BE ALLOWED WITHOUT ~~PRIOR~~ APPROVAL OF THE ENGINEER.
- DISTURBED GROUND SURFACES SHALL BE RECLAIMED WITH A MINIMUM OF 4" OF TOPSOIL, FOR BOTH SODDING AND SEEDING RECLAMATION. IMPORT ADDITIONAL TOPSOIL AS NECESSARY TO SUPPLEMENT THE TOPSOIL SALVAGED ON SITE.
- GRANITE CURB MAY HAVE HISTORIC VALUE AND SHALL BE CAREFULLY REMOVED WITHOUT DAMAGING THE CURB AND REPLACED IN THE SAME LOCATION AND OREINTATION.



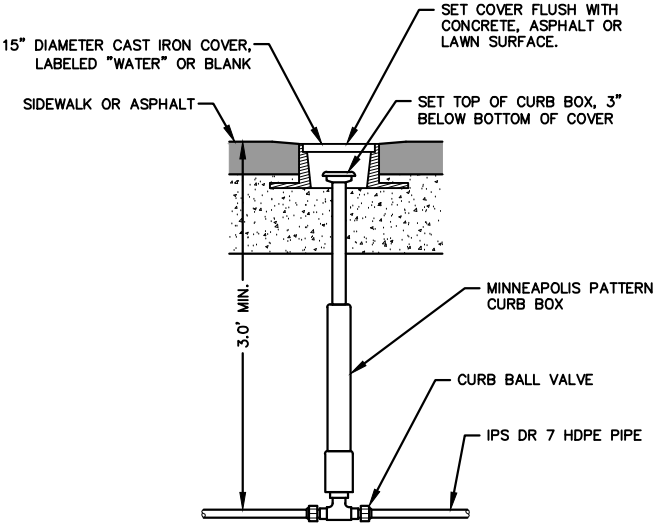
WALL PENETRATION  
NO SCALE



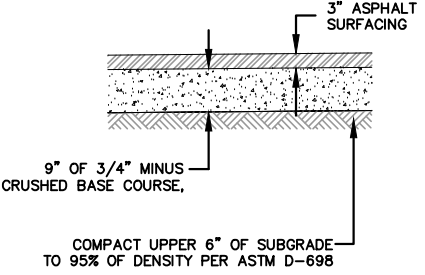
TRENCH DETAIL  
NO SCALE



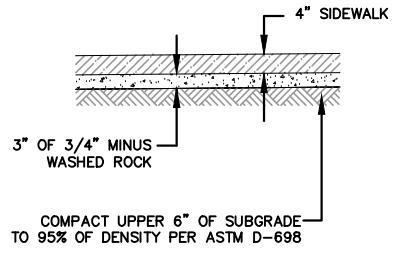
LOUNGE UTILITY ROOM ELEVATION  
NO SCALE



CURB VALVE DETAIL  
NO SCALE



ASPHALT SECTION  
NO SCALE



SIDEWALK SECTION  
NO SCALE

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DETAILS  
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